NIDA Strategic Planning – Complex Patients Workgroup Co-Chairs: Meyer Glantz and David Liu SPB Coordinator: Emily Einstein

Workgroup Webinar Thursday, April 9, 2015 3:00 p.m.

Attendees

Maureen Boyle, Jenae Neiderhiser, John Rotrosen, Edward Nunes, Emily Einstein, Meyer Glantz, David Liu, Geetha Subramaniam, Karran Phillips, Michele Rankin, Will Aklin, Susan Volman, Lisa Metsch, Dave Thomas

Welcome and Overview

Dr. Maureen Boyle opened the meeting and introduced the Co-Chairs, Dr. Meyer Glantz and Dr. David Liu. Dr. Boyle provided a brief background on the initial planning stages of the NIDA Strategic Plan and explained how the Complex Patients Workgroup fits into the development stage. Two other priority workgroups were formed: Big Data and Gene x Environment x Development Interactions (GEDI). Each group will work on its respective area and provide recommendations to NIDA on cross-cutting research priorities and related action items for the next 5 years. Each NIDA Division is also developing its own strategic plan, which will be considered, along with workgroup recommendations, in the development of the final plan.

Timeline

The next steps involve:

- Workgroup meetings from now until mid-June:
 - o Multiple meetings of the workgroups to review comments received during the public comment period and to formulate priority areas for NIDA research.
 - o Submit a 3–5-page recommendations document by June 26.
- Bold Goals Challenge Award:
 - o NIDA will award up to \$10K for top ideas (winner selection by August).
- Draft Strategic Plan released for public comment Summer 2015.
- Final Plan Fall 2015.

Workgroup Charge

Dr. Glantz and Dr. Liu addressed the scope of the Workgroup's task, which is to develop a set of recommendations on strategic research priorities to address complex patients. Complex patients include those with multiple, chronic conditions that might involve a mix of neurological, cognitive, and behavioral processes that complicate the trajectory of addiction, recovery, and relapse. Complex populations (e.g., adolescents, geriatric) would also need to be addressed in the recommendations.

NIDA asks that the workgroup consider cross-cutting themes for research projects (e.g., training needs, sex and gender issues) and suggest ways to take action, perhaps by leveraging technology advances or innovations from other fields. Research should be appropriate to NIDA's overall research goals, but action items might not target NIDA specifically. For instance, it might

examine the adequacy of existing systems or educational qualifications for those in the field. The workgroup should adopt a multi-layered approach when considering what might improve research, prevention, and treatment for complex patients, taking into account social and environmental factors, the range of physiologic issues, and degree of functional deficits that can be complicating SUD in the complex patient population.

Discussion

- Dr. John Rotrosen was concerned about the ambiguity of the workgroup's task and brought up the idea of precision medicine. He noted that treatment and intervention for SUD *alone* involves a range of issues to consider, such as developmental stage, other predisposing factors, and pathophysiologic consequences. Incorporating complex patient factors makes it much more difficult to come up with concrete recommendations. Dr. Glantz explained that the list of topics presented was a subset of the full list, and that it is up to the workgroup to come up with a manageable list of issues to include.
- Dr. Lisa Metsch suggested starting with a discussion of patient phenotype and comorbidities that appear on the list in the presentation.
- Dr. Ed Nunes suggested focusing on co-occurring psychiatric disorders, which are common with SUD and often have adverse effects on treatment and recovery.
- Dr. Jenae Neiderhiser suggested talking about genetic and environmental factors, including prenatal and rearing environments. Dr. Glantz added that maternal stress, as well as trauma and neglect, can have an impact during early childhood. Another participant suggested that animal research might be helpful to address these factors.
- Dr. David Thomas studied pain with SUD, TBI, and stress and other psychiatric conditions as common substrates. He suggested that they may not be comorbid issues, but rather the results of one underlying causal mechanism. Dr. Glantz and Dr. Thomas discussed the NIMH Research Domain Criteria (RDoC) project, which takes this approach.
- Dr. Rotrosen and Dr. Boyle agreed that precision medicine would be ideal for identifying common and final pathways.
- Big data that handles genetics, population heath data, care utilization, and imaging has tremendous potential if we know how to use it. Dr. Rotrosen suggested applying precision medicine strategies to the complex patients task and recommended future merging of datasets from comparative effectiveness studies to address comorbidities and differential responses.
- Dr. Nunes pointed out that NIAAA's National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) is a large, longitudinal study that contains very detailed comorbidity data. He suggested we explore the possibility of a grant for secondary

analyses of NESARC data. Dr. Rotrosen also brought up the databases developing from CTN comparative effectiveness studies as a source of material for secondary analyses.

- Dr. Susan Volman brought up the question of self-medication models vs. shared vulnerabilities to explain co-morbidity of SUD and other psychiatric disorders, as it pertains to how such patients are perceived with regard to the assumed etiology of their substance use, and also with regard to exclusion and inclusion criteria in studies. Further discussion concluded that it is likely that there is no single operating process or model that applies to most patients.
- The call was opened for public comment; none was received.

Action Items

The workgroup will review the background materials and talking points received last week and think about which major topics to structure the final recommendations on.

Next Meeting

The next webinar is scheduled for Monday, April 27 at 4 p.m.

Complex Patients Workgroup Members

External Representatives

Marilyn Carroll – University of Minnesota
Joseph Guydish – UCSF
Jenae Neiderhiser – Pennsylvania State University
Connie Weisner – Kaiser Permanente Northern California
Kathleen Brady – Medical University of South Carolina
Lisa Metsch – Columbia University Mailman School of Public Health
John Rotrosen – NYU
Edward Nunes, Jr. – Columbia University College of Physicians and Surgeons

NIDA Representatives

Meyer Glantz (Co-Chair)
David Liu (Co-Chair)
Geetha Subramaniam
Karran Phillips
Will Aklin
Tanya Ramey
Susan Volman
Dave Thomas
Jacques Normand
Emily Einstein (SPB Coordinator)